

## Claims

### WHAT IS CLAIMED IS:

1. An automated warning system for a platform assembly, said system comprising:
  - a measuring device mountable on the platform assembly for measuring a parameter representing loading on the assembly;
  - a warning device for generating a warning; and
  - a processor operatively connected to the measuring device and the warning device, said processor being configured to:
    - receive information relating to at least one of the design and operation of at least one of the platform assembly and the object;
    - determine a limit for the parameter based on the information;
    - compare the parameter to the limit; and
    - activate the warning device to generate a warning when the parameter unfavorably compares to the limit.
2. A system in accordance with claim 1 wherein the warning device is selected from a group of warning devices consisting of an audible warning device, a visual warning device, a monitoring station, a sub-system for preventing access to the platform assembly, and a safety device for supporting a component of the assembly.
3. A system in accordance with claim 1 wherein the information relating to at least one of the design and operation of the platform assembly comprises at least one of a size of the platform assembly, a shape of the assembly, a size of a component of the assembly, a shape of a component of the assembly, a material of a component of the assembly, a configuration of a component of the assembly, a history of parameter values for the assembly, a configuration of an attachment between the assembly and the object, and a configuration of a support of the assembly.
4. A system in accordance with claim 1 wherein the processor is further configured to select the parameter.

5. A system in accordance with claim 4 wherein the processor is configured to select the parameter based on the information relating to at least one of the design and operation of at least one of the platform assembly and the object.

6. A platform assembly for providing access to an object, said assembly comprising:

- a support;

- a platform extending from the support for providing access to the object;

- a measuring device mounted on at least one of the platform, the support, and the object for measuring a parameter representing loading on at least one of the platform, the support, and the object;

- a warning device for generating a warning; and

- a processor operatively connected to the measuring device and the warning device, said processor being configured to:

- receive information relating to at least one of the design and the operation of at least one of the platform assembly and the object;

- determine a limit for the parameter based on the information;

- compare the parameter to the limit; and

- activate the warning device to generate a warning when the parameter compares unfavorably to the limit.

7. An assembly in accordance with claim 6 wherein the warning device is selected from a group of warning devices consisting of an audible warning device, a visual warning device, a monitoring station, a system for preventing access to at least one of the platform assembly and the object, and a safety device for supporting a component of at least one of the assembly and the object.

8. An assembly in accordance with claim 6 wherein design information comprises at least one of a size of the platform assembly, a shape of the assembly, a size of the support, a shape of the support, a material of the support, a size of the platform, a shape of the platform, a material of the platform, a size of the object, a

shape of the object, a size of a component of the object, a shape of a component of the object, a material of a component of the object, a configuration of a component of the object, a configuration of the support, a configuration of the platform, a history of parameter values for at least one of the assembly and the object, and a configuration of an attachment between the assembly and the object.

9. An assembly in accordance with claim 6 wherein at least one of the support and the platform are attached to the object.

10. An assembly in accordance with claim 6 wherein at least one of the support and the platform are positioned at least partially within the object.

11. An assembly in accordance with claim 6 wherein the processor comprises a switch for selectively choosing between different information relating to at least one of the design and operation of at least one of the platform assembly and the object to be considered by the processor in determining a limit for the parameter of at least one of the platform, the support, and the object.

12. An assembly in accordance with claim 6 wherein the processor is further configured to select the parameter.

13. An automated warning system for a platform assembly attached to an object, said system comprising:

- a measuring device mountable on the object for measuring a parameter representing loading on the object resulting from force transmitted from the platform assembly to the object;

- a warning device for generating a warning; and

- a processor operatively connected to the measuring device and the warning device, said processor being configured to:

- compare the parameter to a limit for the parameter; and

- activate the warning device to generate a warning when the parameter compares unfavorably to the limit.

14. A system in accordance with claim 13 wherein the processor is configured to:

receive information relating to at least one of the design and operation of at least one of the platform assembly and the object; and  
determine the limit based on the information.

15. A system in accordance with claim 13 wherein the warning device is selected from a group of warning devices consisting of an audible warning device, a visual warning device, a monitoring station, a sub-system for preventing access to the object, and a safety device for supporting a component of the object.

16. A system in accordance with claim 13 wherein the information relating to at least one of the design and operation of at least one of the platform assembly and the object comprises at least one of a size of the platform assembly, a shape of the assembly, a size of a component of the assembly, a shape of a component of the assembly, a material of a component of the assembly, a configuration of a component of the assembly, a size of the object, a shape of the object, a size of a component of the object, a shape of a component of the object, a material of a component of the object, a configuration of a component of the object, a history of parameter values for the object, a configuration of an attachment between the assembly and the object, and a configuration of a support of the assembly.